LIMA LOCOMOTIVE WORKS

INCORPORATED

LIMA, OHIO, U. S. A.

60-3 TON GEARED LOCOMOTIVE

PURCHASING DEPARTMENT

MATERIAL

Order No. 414 (3252) 1924 Engine Scheduled Out 60-75 DAYS.

Order No. _____ 19____ " " " _____

Order No. _____ 19____ " " " _____

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Date of Issue JAN. 25 1924

Date Delivered to Purchasing Dept. 1-26 1924

Date Delivered to Stores Dept. 1-28 1924

ED-193

414
3252

414
(3252)
60-3 TRUCK

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DATE	PAGE	ITEMS	

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DATE	PAGE	ITEMS	
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PLATES

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	DESCRIPTION	SPECIAL MATERIAL SPEC. No.	SPECIAL MATERIAL DATE ACCEPTED	ORDERED FROM	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 10—Ash Pan**						
2	8		1 SET	~~ASH OIL~~ OIL Pan Plates	10 M.O. ~~5000-A~~ 5029-B					
3										
4										
5				**Group 13—Boiler**						
6	8		1 SET	Boiler Plates	13 M.O. 5038-A	A.S.M.E.				
7				" Gusset Plates						
8				" " "						
9				" " "						
10				" " "						
11										
12										
13				**Group 20—Brake Equipment**						
14	8		1	Brake Cyl. Bracket	13" x 25 1/2" } 1/2" Tank Steel					
15	8		1	" " "	10 1/2" x 13" }					
16			—	" " "						
17			—							
18										
19				**Group 21—Bumpers**						
20										
21										
22				**Group 22—Cab**						
23	8		1 SET	Cab Plates	22 M.O. 5006-A.					
24										
25										
26				**Group 23—Cab Details**						
27				Cab Saddle Plate						
28				" Joint "						
29				" Ventilator Plate						
30	8		1	" " Cover	#10 x 28" x 30" Tank Steel					
31										
32										
33				**Group 32—Cylinder Details**						
34	8		3	Cyl. Head Casing	20 1/4" Dia. } 1/8" Soft Steel					
35	8		3	St. Chest "	17 3/4" x 21 1/4" }					
36										
37										
38				**Group 36—Dome**						
39	8		1	Dome Casing Shell	32 1/2" x 98" } #10 Soft Steel } For Future					
40	8		1	" " Top	40" ~~32 1/2"~~ Dia. } ~~#10~~ 3/16 Soft Steel }					
41	8		1	" " Flow Bowl	6 1/2" x 45 1/4" } #10 " " }					
42										
43										
44				**Group 37—Drawgear**						
45				Drawgear Shims						
46				" Tie Plate						
47				" " "						
48				" Carrier Plate						
49				" " Bolt Liner						
50										
51										
52				**Group 48—Frame and Details**						
53				Frame Plate—Right						
54				" " —Left						
55				" Reinforcing Plate						
56				" " "						
57				" Spreader						
58				" "						
59										

PLATES

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1				**Group 48—Frame & Det. Con't**						
2				Frame Liner Plate						
3				" " "						
4				" " "						
5				" " "						
6				" " "						
7				" " "						
8										
9	0		1	Expansion Plate	½" x 10½" x 60" } TANK STEEL					
10	0		1	" "	½" x 16" x 76½" }					
11										
12				**Group 53—Hand Rail & Steps**						
13				Cab Step						
14				" "						
15				" "						
16				" "						
17										
18				**Group 54—Headlights**						
19	0		1	Headlight Bracket	5/16" x 17½" x 26½" } TANK STEEL					
20	0		1	" Shelf	3/16" x 20" x 30" }					
21			—	" "						
22			—	Generator Bracket						
23			—	" Shelf						
24										
25				**Group 57—Lagging & Jacket**						
26	0		6	Jacket—Boiler	30" x 60" } #22 B.W.G. PICKLED STEEL					
27	0		8	" — "	30" x 72" }					
28	0		2	" — "	30" x 96" }					
29			—	" — "						
30			—	" — "						
31			—	" Band						
32			—	" —Cylinder						
33										
34	0		1	Cylinder Hood	#16 x 38" x 118" PICKLED STEEL					
35			—	" "						
36										
37				**Group 59—Oil Cups & Lub't'n**						
38			—	Oil Can Shelf						
39										
40				**Group 60—Oil Burner**						
41	0		—	Oil Heater Jacket	#16 x 15" x 76" PICKLED STEEL					
42			—	" " Support						
43										
44				**Group 62—Pilot & Snow Plow**						
45			—	Snow Plow						
46			—	" "						
47										
48				**Group 68—Reverse Lever**						
49	0		1	Reverse Lever Quad. Plate	3/8" x 21" x 26" TANK STEEL					
50			—	" " " Bracket						
51			—	" " " "						
52										
53				**Group 71—Running Boards**						
54				Running Board						
55				" " Bracket						
56				" " "						
57				" " "						
58				" " "						
59										

PLATES

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1				**Group 73—Sand Box**						
2			1	Sand Box Top—Front	45" DIA. } 3/16 SOFT STEEL					
3			1	" " Shell "	13" x 89½" }					
4										
5			2	Sand Box Plate—Rear	35" x 70					
6			1	" " " — "	8½" x 56½" } #12 TANK STEEL					
7			1	" " " — "	8½" x 60" }					
8										
9			1	Sand Box Plate—Flue Sander	30" x 97½"					
10			2	" " " — " "	18" x 40" } #10 TANK STEEL					
11			1	" " " — " "	10" x 10"					
12										
13				**Group 75—Smoke Box & Stack**						
14			1	Smoke Box Front	½" x 47" DIA. } FLANGE STEEL					
15			1	" " Door	3/8" x 37" " }					
16										
17			1	Deflector Plate	3/16" x 12" x 39"					
18			1	" "	3/16" x 18½" x 44"					
19			1	" "	¼" x 18½" x 44"					
20			1	" "	¼" x 5" x 44" } TANK STEEL					
21			1	Draft Pipe	#10 x 7½" x 38"					
22			1	" "	#10 x 16" x 38"					
23			1	" "	#10 x 12" x 60"					
24			—	" "						
25										
26			—	Smoke Stack Plates						
27										
28				**Group 78-St. Ga., S. Val. & Tur.**						
29			—	Auxiliary Turret Casing						
30										
31				**Group 81—Superheater**						
32			1	Superheater Damper	¼" x 9½" x 32½" TANK STEEL					
33			—	" Pipe Jacket						
34			2	" HEADER SUPPORTS	7/8" x 8¼" x 12" TANK STEEL					
35				**Group 83—Tank Engine**						
36			21	Fuel Bunk Plates	3/16" x 51" x 101" } TANK STEEL					
37			2	" " "	3/16" x 24" x 51" }					
38				**Group 85—Tender Frame**						
39			2	Tender Frame Brace Plate	5/8" x 15½" x 16½" TANK STEEL					
40			2	FUEL BUNK PLATES	3/16" x 50" x 56½" " "					
41				**Group 88—Tender Tank**						
42			1 SET.	Tank Plates—Water	88 M.O. 5003					
43			1	" Funnel	3/16" x 22½" x 49½" } TANK STEEL					
44			1	" " Cover	3/8" x 19" DIA. }					
45			1 SET	" Plates—Oil	88M05056					
46			1	" Shoveling Sheet	3/16" x 55½" x 121½" TANK STEEL					
47			—	" FUNNEL "	¼" x 10½" x 59" } TANK STEEL					
48			—	" ~~Coal Gate~~ COVER	3/8" x 23" DIA. }					
49				**Group 91—Trottle & Dry Pipe**						
50			—	Throttle Baffle Plate						
51			—	" " "						
52										
53				**Group 93—Truck & Details**						
54			6	Truck Bolster Plate	3/8" x 11¾" x 48" } TANK STEEL					
55			3	" " "	3/8" x 11¾" x 62" }					
56			3	" " "	¼" x 11¾" x 66" }					
57										
58			12	Truck Gear Cover	9½" x 35" } ⅛" TANK STEEL					
59			24	" " "	9½" x 21" }					

BARS, SHAPES AND BILLETS

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	DESCRIPTION	SPECIAL MATERIAL SPEC. No.	SPECIAL MATERIAL DATE ACCEPTED	ORDERED FROM	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 10—Ash Pan**						
2			22 ~~22~~ FT.	Angle	2" x 2" x 1/4"					
3			~~11~~ 33 FT.	"	3" x 3" x ~~3/8~~ 3/8"					
4			20 "	"	3 1/2" x 3" x 1/2"					
5			~~23~~ 7 FT.	~~Bar Iron~~ "	~~2" x 1/4"~~ 1 1/4" x 1/4" x 1/4"					
6										
7				**Group 11—Axle**						
8			6	Axle Billet	8" x 8" x 850# all wet.					
9										
10				**Group 14—Boiler Details**						
11			—	Angles						
12			1	Brace Tee	6" x 1" x 5 1/4" x 1 1/4" - 11'-0" LONG.					
13										
14				Crown Bar						
15				" "						
16				" "						
17			1 SET	Stay Bolt Iron	455 FT. 15/16 DIA.					
18			1 "	" " "	290 FT. 1" "					
19			1 "	" " " —Hollow	150 FT. 1" " - ROME HOLLOW					
20			1 "	" " " "	24 FT. 1 1/8" " - " "					
21				**Group 20—Brake Equipment**						
22			6	Brake Beam	9" - 25# EYE BEAM 44" LONG.					
23			—	" Cyl. Bracket Channel						
24										
25				**Group 21—Bumper**						
26			2	End Timber Channel	12" - 40# CHANNEL 102" LONG					
27			—	" " "						
28										
29				**Group 22 & 23—Cab & Details**						
30			70 FT.	Cab Angle	2" x 2" x 1/4"					
31			16 "	" "	1/2" x 1/2" x 1/4"					
32			25 "	" Beading	1/4" x 5/16" HALF OVAL					
33			80 "	" "	1" x 1/2" " ROUND					
34			1	" Saddle Angle	2" x 2" x 1/4" - 4'-6" LONG					
35										
36				**Group 48—Frame and Details**						
37			1	Frame—Right	12" - 45# EYE BEAM 29'-8" LONG.					
38			1	" —Left						
39			4	" Body Bolster	10" - 30# CHANNEL 59 7/8" LONG.					
40			1	" Spreader	12" - 20 1/2# " 59 7/8" "					
41			—	" Brace						
42			10 FT.	" Angle	6" x 6" x 5/8"					
43			6 "	" "	6" x 3 1/2" x 5/8"					
44			2 "	" "	3 1/2" x 3 1/2" x 5/8"					
45			1	" EXP. PLATE ANGLE	3 1/2" x 3" x 1/2" - 59 1/2" LONG.					
46			1	" " " "	3" x 3" x 1/2" - 57 1/2" "					
47			4	" " " "	3 x 3 x 1/2" - 6 3/4" "					
48				" "						
49										
50				**Group 57—Lagging & Jacket**						
51			16 FT.	Cylinder Hood Angle	1 1/2" x 1 1/2" x 1/4"					
52										
53				**Group 71—Running Board**						
54				Angle						
55				"						
56				"						
57			75 FT.	Band	1/8" x 1 3/8"					
58										
59										

BARS, SHAPES AND BILLETS

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1				**Group 72—Rods**						
2	✓		1	Billet—Rods	3"×6"×345#					
3	✓		1	" — " Straps	3½"×5"×240#					
4										
5				**Group 74—Shafts**						
6	✓		1	Crank Shaft Billet	7"×13"×1760#					
7										
8	✓		1	Line Shaft—Front	81¼"×4⅜" DIA.					
9	✓		1	" " —No. 2	89"×4⅜" "					
10			—	" " —No. 3						
11	✓		1	" " —Rear	82½"×4⅜" DIA.					
12										
13				**Group 75—Smoke Box & Stack**						
14	✓		7 Ft.	Angle—Deflector Plate	2"×2"×¼"					
15	✓		10"	" —Netting	2"×2"×¼"					
16			7	" —Stack						
17				Stack Ring						
18				" Beading						
19	✓		1	ANGLE-DEFLECTOR PLATE	3"×2"×¼"-48" LONG.					
20				**Group 83—Tender Tank**						
21	✓		7Ft	Fuel Bunk Angle	2"×2"×¼"					
22	✓		20"	" " Beading	¼"×5/16" HALF OVAL					
23	✓		~~32~~"	" " Bar Iron—Wood Rack	~~2"×⅜" FLAT BAR~~					
24	✓		~~16~~"	" " " " — " "	~~2"×5/8"~~ " "					
25				**Group 85—Tender Frame**						
26	✓		1	Frame—Front	10"-30# EYE BEAM 5'-10" LONG.					
27	✓		2	" —Sides	10"-30# " " 10'-11" "					
28	✓		2	" —Bolster	10"-25# CHANNEL 5'-10" "					
29	✓		2	" Brace Channel	10"-20# " 55⅜" "					
30	✓		2	" " "	10"-20# " 55 9/16" "					
31	✓		1	" Channel—Rear	10"-20# " 5'-10" "					
32	✓		4 Ft.	" Angle	6"×6"×½"					
33	✓		2"	" "	5"×3"×⅝"					
34	✓		3"	" "	6"×3½"×½"					
35	✓		3"	" "	3"×3"×½"					
36	✓		13"	" "	3½"×3½"×½"					
37										
38				**Group 88—Tank Tender**						
39	✓		125Ft	Tank Angle—Water	2"×2"×¼"					
40			—	" " — "						
41	✓		36Ft.	" Beading— "	1¼"×5/16" HALF OVAL					
42	✓	X	~~72~~"	" Bar Iron—Wood Rack	~~2"×⅜"~~					
43	✓		~~30~~"	~~Tank Angle~~—Oil	~~2"×5/8"~~					
44	✓		50"	" ANGLE— "	2"×2"×¼"					
45			—	" Beading— "						
46	✓		17Ft.	" Coal Gate Angle	2"×2"×¼"					
47				**Group 93—Truck & Details**						
48	✓		6	Bolster Channel	48" LONG } 9"-25# CHANNEL					
49	✓		6	" "	66" " }					
50	✓		6	" "	48" " } 6"-15½# CHANNEL					
51	✓		3	" "	62" " }					
52	✓		3	" "	66" " }					
53										
54	✓		6	Tie Bar	2"×4"×108" SOFT STEEL					
55			T	" " Angle						
56										
57				**Group 95—Wheels & Tires**						
58	✓		12	Tire—Section 95 M.O.5000-A	32" O. D. 27" I. D. 5½" Wide 2½" Thick					
59										

MISCELLANEOUS DETAILS AND SPECIALTIES

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	DESCRIPTION	SPECIAL MATERIAL SPEC. No.	SPECIAL MATERIAL DATE ACCEPTED	ORDERED FROM	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 10—Ash Pan**	4½" x 1¾" x 6"					
2	8 ✓		2 ~~4~~	Hinge—Damper	~~5½ x 8" x 7½"~~ HALF BUTT.					
3	8 ✓		~~4~~	" —Cleaning Door	~~4½ x 3¾" x 6"~~					
4										
5				**Group 12—Bell**						
6			1	Bell						
7			1	" Ringer						
8										
9				**Group 14—Boiler Details**						
10	8		4	Flex. Bolts	28½" x 1⅛" DIA.					
11	8		4	" "	27½" x 1⅛" " } TATE-STYLE "D"					
12	8		4	" "	26" x 1⅛" "					
13	8		4	" "	23½" x 1⅛" " }					
14	8		16	" " Sleeves	TATES STYLE H - 2½" LONG.					
15			⎫	" " "						
16			⎪	" " "						
17			⎪	" " Nuts						
18			⎭	" " "						
19	8		16	" " Caps	TATES STYLE D					
20			—	" " "						
21	8		82	Tubes	2" O. D. #12 B.W. Gauge 9 Ft. 0 In.			A.S.M.E.		
22	8		10	Flues CD. 142 x 196	5⅜" O. D. #9 B.W. Gauge 9 Ft. 0¾" In.			A.S.M.E.		
23	8		82	Ferrules—Copper	2" O. D. 1/16" Thick ⅝" Wide					
24	8		10	" — "	4⅝" O. D. 1/16" Thick ⅝" Wide					
25										
26				**Group 20—Brake Equipment**						
27	8		1 SET	Brake—Air	20 MO 5024					
28			—	" —Trans. Air						
29	8		13	" —Shoes	(S) PAT. 20-8					
30										
31				**Group 21—Bumper**						
32	8		2	End Timber	8" x 12½" x 106"					
33	8		1	" "	8½" x 13" x 106"					
34	8		1	" "	8½" x 11" x 106"					
35			—	" "						
36										
37	8		2	End Timber Drawhead Blocks	22" x 11½" x 4½"					
38										
39				**Group 23—Cab Details**						
40			—	Curtain						
41	8		2	CAB DOOR LOCKS	YALE NIGHT LOCK - RIM LATCH.					
42	8		1	"XX" CAB WINDOW GLASS ~~Hinge—Door~~	8" x 18"					
43	8		1	~~"~~ " " " " ~~—Window~~	9" x 19"					
44	8		2	" " " " ~~—Ventilator~~	12" x 12"					
45	8		2	" " " "	12" x 24"					
46	8		1	" " " " ~~Seat Cushion~~	13" x 13"					
47	8		4	" " " "	22" x 26"					
48			—	Sliding Door Roller & Hangers						
49			—	" " Track						
50										
51				**Group 26—Cocks & Valves**						
52	8		1	Valve—Air Pump	1" CRANE #1811					
53			—	" — " " Inter.						
54	8		1	" — " " Drain	¼" AIR LOCK					
55	8		1	" —Blower at steam turret	1" CRANE #1813					
56			—	" —Brake						
57			—	" — " Exhaust Drain						
58			—	" —Bell Ringer Blower at Turret	¾" globe crane #4					
59	8		2	" —Check Pipe Drain	½ CRANE GLOBE #4					

MISCELLANEOUS DETAILS AND SPECIALTIES

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1				**Group 26—Cocks & Valves Con't**						
2			1	Valve—Exhaust Drain	1/2" CRANE GLOBE #4					
3			1	" —Fuel Sprinkler						
4			1	" — " " Drain	1/4" AIR COCK					
5			—	" —Generator						
6			1	" —Injector	1 1/2" CRANE #1811 & 1 3/4" C.P. UNION					
7			1	" ~~Lubricator~~	1 1/2" " #1803 & 1 3/4" " " "					
8			1	" —Siphon	1 1/2" " #1811 —					
9			1	" — " Drain	3/8" AIR COCK					
10			1	" —Steam Gauge Cock	1/4" CYL. COCK LEVER HANDLE & 3/8" C.P. UNION					
11			1	" —Water Glass Drain	1/4" GLOBE					
12			1	" —Steam Chest "	1/2" " CRANE #4					
13			2	" —Air Sander	1/4" "					
14			1	" —Oil Burner	1/2"					
15			1	" —" Heater	1/2" CRANE GLOBE #4					
16			3	" —" " Drain	3/8" AIR COCK					
17			1	" —" Tank Heater						
18			1	" —" Blow Back	1/2" CRANE GLOBE #4					
19			1	" —" Tank						
20			1	" ~~Cyl. Cock~~ DRIFTING	3/4" CRANE GLOBE #4					
21			1	Blow-Off Cock	1 1/2" CRANE					
22			6	Cylinder "	1/2" UNION BIBB.					
23			1	SMOKE BOX DRAIN	1/2" CUT OUT COCK					
24				**Group 27—Cocks & Val.** {Gauge. Water & Spec.						
25			3	Gauge Cocks	3/4" NATHAN TYPE 272A1001 EXCEPT 3/4" P.THD.					
26										
27			1	Water Gauge	#9 REFLEX					
28			2	" " Cocks	3/4" NATHAN					
29										
30				**Group 37—Drawgear**						
31			—	Draft Gear						
32										
33				Couplers	Knuckles—Face {SLOTTED SOLID					
34										
35				Coupler Clevis						
36										
37				Coupler Link						
38										
39				**Group 44—Exhaust Pipe**						
40			1	Exhaust Pipe	6" W.I. PIPE 8'-0" (9'-6") LONG.					
41										
42				**Group 45—Fire Door & Brick**						
43			—	Fire Door						
44										
45			450	Fire Brick	9" x 4 1/2" x 2 1/2" STEEL KING BRAND					
46			6	" CLY	100# SACKS					
47				**Group 54—Headlight & Lamps**						
48			1	Headlight—Oil	16" RD CASE.					
49				" —Electric						
50				" —Acetylene						
51				" Generator						
52				" Switches						
53										
54			—	Headlight Equipment—Electric						
55										
56			1	Lamp—Cab	DRESSEL					
57			1	" —Water Gauge	4					
58			—	" —Marker						
59										

MISCELLANEOUS DETAILS AND SPECIALTIES

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	DESCRIPTION	SPECIAL MATERIAL SPEC. No.	SPECIAL MATERIAL DATE ACCEPTED	ORDERED FROM	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 55—Inj. & Feed Water**						
2	P		1	Injector—Right #7 NATHAN LIFTING	Connections—Steam 1 3/4" COPPER					
3			—	MONITOR-LEVER HANDLE TYPE #88	" —Water 1 1/2" IRON					
4			—		" —Delivery 1 1/2" "					
5	P		1	Injector—Left #7 NATHAN LIFTING	" —Steam 1 3/4" COPPER					
6				MONITOR-LEVER HANDLE TYPE #88	" —Water 1 1/2" IRON					
7					" —Delivery 1 1/2" "					
8			—	Feed Water Strainers						
9	P		2	Inj. Check Valve	1 1/2" SWING FOR 200# PRESSURE					
10			—	" " " Flange						
11	P		2	" Stop "	552D5010					
12										
13				**Group 57—Lagging & Jacket**						
14	P		1 SET	Lagging—Boiler	57M.O.5000-A					
15				" —Cylinder						
16				Washout Plug Cover						
17										
18				**Group 59—Lubrication**						
19	P		3	~~Oil~~ GREASE Cup—Crosshead Pin	#1 POWELL PLAIN STEEL SHANK. #8 SPRING STAR					
20				" " — " Guide						
21				" " —Crank Pin						
22				" " — " Bearer						
23	P		1	Oil	SAMPLE CAN					
24			—	Grease Cup—Bottom Bracket						
25	P		1	Grease	SAMPLE CAN					
26	P		1	Lubricator—Cylinder	NATHAN 4 FEED 1918 TYPE NO CHOKE PLUGS					
27			—	" —Air Pump	" 3 " " " COMPLETE WITH STEAM VALVES. CHOKE CENTER FEED					
28			—	" Checks						
29										
30	P		1	**Group 60—Oil Burner**	2" A.B.C.					
31										
32			—	**Group 62—Pilot & Snow Plow**						
33										
34				**Group 63—Pipe Fittings**						
35			—	Fire Extinguisher						
36	P		1	" PUMP	#6-L VANDUZEN WITH 2 1/2" SUCTION PIPE					
37			—	Hose—Fire						
38	P		1	" —Sander, Hand	1 5/8" X 8'-0" LONG. - 3 PLY.					
39			—	" — " , "						
40	P		2	" — " , Air	1" x 16'-0" LONG - 3 PLY.					
41	P		1	" —Siphon	4"-16'-0" LONG. - ENLARGED ENDS.					
42			—	" —Sprinkler						
43	P		2	" —Tank Connection	2"-60" WIRED SUCTION					
44	P		1	" STEAM (FOR FIRE PUMP)	1 1/4" x 4'-8"					
45			—	Pipe—Copper Branch	O. D. Thick Long					
46	P		3	" — " Tallow	1/2" O. D. .083" Thick 21'-0" Long					
47	P		1	" — " Inj. Steam	1 3/4" O. D. .120 Thick ~~3'-6"~~ 6'-6" Long					
48	P		1	" — " Lub. "	1" O. D. .109" Thick ~~5'-0"~~ 5'-0" Long					
49	P		1	" — " Steam Gauge	3/8" O. D. .065" Thick 3'-0" Long					
50	P		1	" — " Air "	1/2" O. D. .083" Thick 3'-0" Long					
51	P		1	" —Dry	4 1/2" I.D. 5" O.D. - 6'-0" LONG.					
52	P		1	" —Steam	4" I.D. 4 1/2" O.D. 8'-6" "					
53			+							
54				**Group 65—Piston & Rod**						
55	P		9 SET	Piston Rod Packing	652A5153 (PAXTON & MITCHELL FOR SUPERHEATED STEAM)					
56	P		3	" " " Spring	#3					
57	P		13	WASHOUT PLUGS	PRIME TO REPLACE CO. 662A5007					
58				**Group 71—Running Boards**						
59				Running Boards						

for additional copper pipe see record sheet in back of book

3082

MISCELLANEOUS DETAILS AND SPECIALTIES

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	DESCRIPTION	SPECIAL MATERIAL SPEC. No.	SPECIAL MATERIAL DATE ACCEPTED	ORDERED FROM	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 73—Sand Box**						
2			—	Sanders—Air						
3										
4	O		1	Flue Sander Funnel	CD. 732A5033					
5	O		1	" " Scoop						
6										
7				**Group 74—Shafts**						
8				Gear Rim—Cut Teeth						
9				Pinion — " "						
10				" — " "						
11										
12				**Group 75—Smoke Box & Stack**						
13	8		1	Smoke Box Netting	36"x45" #12 WIRE 2½"x2½" MESH					
14	8		1	" " "	19"x19"					
15			—	" " "						
16	8		1	Stack Netting	#16x12½"x132" 4x4 MESH.					
17	8		1	" "	#16x41½" DIA.					
18										
19				**Group 76—Springs**						
20			—	Springs—Draft Gear						
21	8		6	" —Truck Box	CD. 762A5008					
22	8		60	" — " Bolster	CD. 762A5002					
23										
24				**Group 78-St. Ga., S. Val. & Tur.**						
25	8		1	Steam Gauge	5½" ASHCROFT BRASS RING.					
26										
27	8		2	Safety Valve CONSOLIDATED FORM H	Size 2" Open Set At 200#					
28				" "	" ~~Muffled~~. ~~Set At~~					
29				" "	Connections, Male, ~~Female~~					
30										
31				**Group 81—Superheater**						
32	8		1	Superheater Header	L.S.Co's. CARD 10343-B					
33	8		1 SET	" Tubes	M.O. 2661					
34	8		10	" Bands	L.S.Co's. CARD 2L-1988					
35	8		10	" Supports	" " " " 2L-11754					
36	8		1	" Damper Cyl.	" " " " 4L-11436-A					
37										
38				**Group 82—Tank Valves**						
39	O		1	Tank Cock	¼" STOP COCK					
40			—	" Coal Gate Hinge						
41				**Group 92—Tools**						
42				Equipment Sheet						
43	8		1 SET	Wrench List	92MO5009					
44	8		1 PAIR	Wrecking Frogs	No. 4 LIMA.					
45										
46				**Group 94—Valves**						
47	8		2 #LB	Valve Stem Packing	VULCABESTON C.C. PACKING-DIA. OF VALVE STEM 1 3/16"-INSIDE DIA. OF STUFFING BOX 2¼" FOR SUPERHEATED STEAM (JOHNS & PRATT CO.)					
48				" " " ~~Spring~~						
49										
50	8		3	Valve Plate Spring	#2					
51										
52			—	Valve—Balance Slide						
53										
54				**Group 95—Wheels & Tires**						
55			—	Wheels—Chilled						
56										
57				**Group 96—Whistle**						
58	P		1	Whistle	5"-5 CHAMBER C. I. CHIME.					
59										

ANNEALED STEEL CASTINGS

15-347
75-3 A1V1H4

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	PATTERN NUMBER	PATTERN CHECK	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 10—Ash Pan**				
2			—	Ash Pan Hoppers				
3			—	" " Slides				
4								
5				**Group 12—Bell**				
6			—	Bell Tongue				
7								
8				**Group 14—Boiler Details**				
9			7	Boiler Brace Roof Tees				
10				" " Crown "				
11			L	" Crown Bar Lugs				
12	8		1	Mud Ring	14-111			
13								
14				**Group 18—Brackets**				
15	8		1	Bracket, Bottom	18-3			
16	8		4	" Crank Box Caps	18-32			
17			—	" Pad, Steam Bracket				
18								
19				**Group 20—Brake Equipment**				
20			—	Brake—Air Pump Bracket				
21			—	" Beam				
22	8		6	" " Fulcrum	20-87			
23	8		8	" Hanger Lugs	20-6			
24	8		12	" Heads	20-22			
25	8		3	" Lever Fulcrum	20-196			
26			—	" Rod Jaw				
27	8		2	" Reservoir Bracket	20-110			
28			7	" Valve Bracket				
29				" Strut				
30			L	" "				
31								
32				**Group 21—Bumper**				
33			—	Bumper—Front				
34			—	" —Rear				
35								
36				**Group 30—Crosshead**				
37	8		3	Crosshead	30-5			
38								
39				**Group 31—Cylinder**				
40	8		3	Cylinder Frame, ~~Right~~	31-56			
41			—	" " , Left				
42								
43				**Group 37—Drawgear**				
44			7	Draft Gear Frame, Right Front				
45				" " " , Left "				
46				Draft Gear Frame, Right Rear				
47				" " " , Left "				
48				" " Friction Plates				
49				" " Sliding Bar, Right				
50				" " Sliding Bar, Left				
51				" " Connecting Bar, Front				
52				" " Connecting Bar, Rear				
53			L	" " Yoke Blocks				
54								
55	8		2	Couplers	37-2			
56	8		2	" Knuckles	37-4			
57	8		2	" Lock	37-12			
58	8		2	" " Lifter	37-13			
59								

ANNEALED STEEL CASTINGS

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	PATTERN NUMBER	PATTERN CHECK	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 37—Drawgear Con't.**				
2			7	Drawheads				
3				" Carrier Links				
4				" Guides				
5								
6	8		1	Brace Foot, Bolster	37-73			
7	8		1	" " , Drawhead	37-74			
8								
9			—	Shakle Bar Pocket, Eng. Frame				
10			—	" " " , Tender Frame				
11	8		1	" " Brace Foot	37-79			
12								
13				**Group 39—Eccentrics**				
14			—	Eccentric Strap—Top Half				
15			—	" " —Bottom Half				
16								
17				**Group 44—Exhaust Pipe**				
18			—	Exhaust Pipe Gland				
19								
20				**Group 48—Frame & Details**				
21			7	Boiler Side Pad				
22				" " "				
23				Brace—Frame				
24	8		2	" —Front End Timber	48-72			
25			—	" —Rear " "				
26								
27	8		2	Center Plate	48-~~54~~ 656			
28								
29			—	Deck Plate				
30								
31	8		1	End Casting	48-186			
32								
33			—	Expansion Plate Bracket				
34								
35			—	Furnace Bearer—Right				
36				" " —Left				
37								
38			—	Side Bearing				
39								
40	8		4	Truss Pads—Right	48-8			
41	8		4	" " —Left	48-9			
42			—	" Rod Saddle				
43								
44				**Group 58—Link Motion**				
45	8		3	Link	58-1			
46			—	" Hanger Fulcrum				
47								
48				**Group 66—Plugs**				
49			—	Washout Plug Cap				
50								
51				**Group 68—Reverse Lever**				
52			—	Reverse Lever Arm				
53			—	" " Fulcrum Bracket				
54								
55			—	Quadrant Bracket				
56								
57				**Group 71—Running Boards**				
58			—	Running Board Bracket				
59								

ANNEALED STEEL CASTINGS

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	PATTERN NUMBER	PATTERN CHECK	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 74—Shafts**				
2	✓		2	Coupling Ring No. 1—Whole	74-16			
3	✓		2	" " No. 1—Halves	74-17			
4	✓		2	" " No. 2—Whole	74-16			
5	✓		2	" " No. 2—Halves	74-17			
6	✓		2	" " No. 3—Whole	74-16			
7	✓		2	" " No. 3—Halves	74-17			
8			—	" " No. 4—Whole				
9			—	" " No. 4—Halves				
10	✓		1	" Sleeve No. 1	74-317			
11	✓		1	" " No. 2	74-317			
12	✓		1	" " No. 3	74-316			
13				" " No. 4				
14				" Square Shaft No. 1				
15				" " " No. 2				
16				" " " No. 3				
17				" " " No. 4				
18								
19	✓		2	Collars—Line Shaft No. 1—Core	74-342			
20	✓		2	" —" " No. 1— "	74-360			
21	✓		2	" —" " No. 2— "	74-342			
22	✓		2	" —" " No. 2— "	74-360			
23	✓		2	" —" " No. 3— "	74-342			
24	✓		1	" —" " No. 3— "	74-360			
25			—	" —" " No. 4— "				
26			—	" —" " No. 4— "				
27	✓		1	" —" " Rear — "	74-334			
28								
29				COUPLINGS				
30	✓		1	Crank—Front Str. Taper Core	74-27			
31	✓		1	" —Rear Str. Taper "	74-27			
32	✓		1	Line Shaft—Front "	74-489			
33	✓		1	" " No. 2—Front "	74-489			
34	✓		1	" " No. 2—Rear "	74-489			
35			—	" " No. 3—Front "				
36			—	" " No. 3—Rear "				
37	✓		1	" " Rear "	74-489			
38								
39	✓		6	Gear Rims } H. C. Steel to Lima Specification L-2	74-203-A			
40								
41	✓		6	Pinions Core } H. C. Steel to Lima Specification L-2	74-204-A			
42			—	" " } H. C. Steel to Lima Specification L-2				
43			—	" " } H. C. Steel to Lima Specification L-2				
44								
45				**Group 75—Smoke Box & Stack**				
46	✓		2	Smoke Box Brace Pad	75-10			
47								
48				**Group 78—St. Ga., S. Val.& Tur.**				
49			—	Safety Valve Turret				
50								
51				**Group 79—Steam Pipes**				
52			—	Steam Pipe				
53								
54				**Group 85—Tender Frame**				
55	✓		1	Center Plate	48-~~154~~ 656			
56								
57	✓		1	End Casting	85-20			
58	✓		2	" Timber Brace	48-~~22~~			
59			—	Side Bearing				

ANNEALED STEEL CASTINGS

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	PATTERN NUMBER	PATTERN CHECK	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 88—Tender Tank**				
2			—	Tank Lug				
3								
4				**Group 91—Throttle**				
5			1	Throttle Lever Quadrant	91-21			
6								
7				**Group 92—Tools**				
8			—	Swab Cup Wrench				
9								
10			—	Wrecking Frog—Right				
11			—	" " —Left				
12								
13				**Group 93—Truck & Details**				
14			3	Bolster End Casting—Right	93-163			
15			3	" " " —Left	93-163			
16				" Guides				
17								
18			3	Center Plate	93-133			
19								
20			—	Side Bearings				
21								
22			3	Truck Column—Right	93-170			
23			3	" " —Left	93-172			
24								
25				Truck Cross Tie Bar				
26				" " " "				
27				" " " "				
28								
29				Truck Frame—Right				
30				" " —Left				
31				" " Splice				
32								
33			2	Truck Box—Right Front Truck	93-62			
34			2	" " — " No. 2 "	93-62			
35			—	" " — " No. 3 "				
36			2	" " — " Rear "	93-62			
37				" " Cap—Right Front Truck				
38				" " " — " No. 2 "				
39				" " " — " No. 3 "				
40				" " " — " Rear "				
41								
42			6	Truck Pedestal	93-206			
43			—	" " Cap				
44			6	" " Inside Box	93-175			
45								
46			—	Journal Box Wedge				
47								
48				**Group 94—Valves**				
49			—	Valve Stem Crosshead				
50								
51				**Group 95—Wheels & Tires**				
52			—	Wheel Center				
53								
54				**Group 96—Whistle & Rigging**				
55			—	Whistle Lever				
56								
57								
58								
59								

MALLEABLE CASTINGS

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	PATTERN NUMBER	PATTERN CHECK	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 10—Ash Pan**				
2								
3				**Group 12—Bell**				
4	8		1	Bell Crank	12-7			
5	8		1	" Tongue	12-2			
6								
7			—	**Group 18—Brackets**				
8								
9				**Group 20—Brake Equipment**				
10			—	Brake Heads				
11			—	" Valve Handle				
12								
13				**Group 23—Cab Details**				
14	8		2	Cab Window Clamp Screw	23-2			
15			—	" Storm Window Rod Bracket				
16	8		2	" Ventilator Clamp	23-3			
17				" " "				
18				" " " Brackets				
19				" " " Handle				
20				" " " Rod Bracket				
21				" " Lift Handle				
22								
23				**Group 26—Cocks & Valves**				
24				Cylinder Cock Body				
25				" " Cap				
26				" " Lever				
27								
28				Oil Cock Body				
29				" " Cap				
30				" " Plug				
31								
32				**Group 27—Cocks & Val.** (Gauge, Water & Spec.)				
33			—	Gauge Cock Handle				
34								
35				**Group 28—Cock Rigging**				
36	V		3	Cylinder Cock Rod Lever	28-1			
37								
38				**Group 37—Drawgear**				
39			—	Coupler Clevis				
40			—	" Link				
41								
42			—	Uncoupling Shaft Bracket				
43								
44				**Group 53—Hand Rail & Steps**				
45			—	Handrail Bracket				
46			—	" Bumper Post				
47								
48			—	End Timber Handle Bracket				
49								
50				**Group 54—Headlight & Lamps**				
51			—	Marker Lamp Bracket				
52								
53				**Group 55—Inj. & Feed Water**				
54				Hose Connection				
55				" " Nuts				
56				" " "				
57				" " Nipple				
58								
59								

MALLEABLE CASTINGS

	CHECK COLUMN	DATE ADDED INFORMATION DRAFT ROOM	NUMBER REQUIRED	NAME OF DETAIL	PATTERN NUMBER	PATTERN CHECK	PUR. ORDER No.	PUR. ORDER DATE
1				**Group 57—Lagging & Jacket**				
2	81		36	Jacket Band Lugs	57-28			
3								
4	8		9	Washout Plug Casing	57-4			
5								
6				**Group 59—Lubrication**				
7			—	Grease Cup				
8								
9			—	Oil Cup				
10								
11			—	Oil Cup Base				
12								
13				**Group 63—Pipe Fittings**				
14			—	Blower Pipe Elbow				
15			—	" " Flange				
16								
17				**Group 68—Reverse Lever**				
18			—	Reverse Lever Latch Handle				
19			—	" " " Guide				
20								
21				**Group 73—Sand Box**				
22			—	Sand Box Lever				
23								
24				**Group 75—Smoke Box & Stack**				
25			—	Smoke Box Door Buttons				
26	P		1	" " " Hinge	75-25			
27	P		1	" " " "	75-26			
28								
29				**Group 78-St. Ga., S. Val. & Tur.**				
30			—	Turret Valve Handle				
31								
32				**Group 82—Tank Valve**				
33			—	Tank Cock Body				
34				" " Cap				
35				" " Plug				
36								
37				**Group 91—Throttle & Dry Pipe**				
38			—	Throttle Lever Latch Handle				
39				" " " Guide				
40				" " Quadrant				
41								
42			—	**Group 92—Tools**				
43								
44			—	**Group 93—Truck & Details**				
45								
46				**Group 96—Whistle**				
47			—	Whistle Lever				
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								

THE FOLLOWING RECORD TO BE MADE FOR EACH
SHAY LOCOMOTIVE AND SENT TO SHAY DRAWING ROOM - MAIL NO. 70

Order No. 414 Engine No. 3252 Class 60-3- 11"X12"

Lubricator, - Make one Nathan four feed Style 1918 style No.

Injector - Make, Size and Type, Right #7 Nathan lifting type 88 Left #7 Nathan lifting type 88

Steam Gauge - Make Ashcroft Size 5½"

Steam Valve to Lubricator - Make Nathan Size ¾" angle Style 935-Z

" " " Blower - Make Crane Size ¾" angle Style #1813 1803-L

" " " Injector- Make Crane Size 1½" Style #1811-R

" " " Air Pump -Make Crane Size 1" angle Style #1811

" " " Steam brake - Make None Size None Style None

" " " Generator - Make None Size None Style None

" " " Syphon - Make Crane Size 1½" Style #1811

Blow Off Cock - Make Crane Size 1½"

Tumbling Shaft ball, coupling center 18 ¾"

Link pin collar thickness, Rear 7/16" Center 3/8" Front 7/16"

Valve travel in full gear,	Rear Cyl.	Center Cyl.	Front Cyl.
Forward Motion	2 21/32	2 21/32	2 21/32
Backward "	2 21/32	2 5/8	2 5/8
Lead in (Forward "	1/64	1/32	1/64
Full Gear (Backward "	1/32	1/32	1/32

Feed pipe hose, size & length 2" x 4'6"

Size & length of oil pipe to cylinders, Rear ½ x 6'4" Center ½ x 8'8" Front ½ x 10'6"

Size & length of oil pipe ot steam chest, Rear ½ x 7'- Center ½ x 9'6" Front ½ x 11'6"

Size & length of oil pipe to air pump ½ x 28"

Size & length of oil pipe to steam brake None

Size & length of injector steam pipe, Right 1¾" x 36" Left 1¾" x 41"

Size & length of injector delivery pipe (when copper only) Right Left

Size & length of steam gauge steam pipe ⅜" x 48"

Size & length of lubricator steam pipe Right 1" x 22" Left 1" x 38½"

Size & length of pipe from main reservoir to air gauge ⅜" x 48"

Size & length of pipe from equalizing reservoir to air gauge ⅜" x 5'6"

Size & length of pipe from brake valve to air gauge ⅜" x 6'8"

Size & length of pipe from brake cylinder to air gauge ⅜" x 9'

Size & length of pipe from main reservoir to governor ⅜" x 11'

Size & length of pipe from brake valve to governor ⅜" x 10'

Size & length of pipe from auto. brake valve to tee ½" x 11"

Size & length of pipe from independent brake valve to tee ½" x 11"

Size & length of pipe from tee to distributing valve ½" x 6'7"

Size & length of release pipe from independent brake valve to tee ½" x 7'5"

Size & length of pipe between brake valves ½" x 18"

Size & length of exhaust pipe 6" x 7'8"

Size & length of exhaust pipe nipple 6" x 19"

Size & length of lubricator drain Right ⅜" x 22" Left ⅜" x 40"

Signed [signature]

Date 2-29-24

Super Dampers Cyl to Blower 11/16" x 100"
" " " to St Pipe 11/16" x 42"

[signature]